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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/617,578

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Steven P. Nally

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EXAMINER

ALANKO, ANITA KAREN

ART UNIT

PAPER NUMBER

1765

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

01/24/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/617,578

Applicant(s)

NALLY ET AL.

Examiner

Anita K. Alanko

Art Unit

1765

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 22,23,25,49,50,56 and 58-62 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 22,23,25,49,50,56 and 58-62 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date: _____   | 6) <input type="checkbox"/> Other: _____                          |

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***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 22-23 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kye et al (KR 1997-0008549) in view of Levit (US 5,348,033).

Kye discloses a method (page 2 of English translation, Fig.1) comprising chemically etching (page 2, lines 17-21) at least a portion of the surface (markings are removed) to remove a layer of material from the package and form a marking surface; and cleaning residual materials (with water, page 2, lines 28-33) from the package after terminating the etching of the package surface.

As to amended claim 22, Kye fails to disclose marking after cleaning. Levit teaches that after removal of marks, and after cleaning, that it is conventional to add new, high quality marks

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(col.1, lines 19-28). It would have been obvious to one with ordinary skill in the art to mark after cleaning in the method of Kye because Levit teaches that this is a useful, conventional technique.

As to claim 23, Examiner takes official notice that HF is a conventional etchant. It would have been obvious to one with ordinary skill in the art to use HF to etch in the modified method of Kye because it is a conventional etching composition.

As to claim 25, since the modified method of Kye has controlled removal of a mark, it would have been obvious to one with ordinary skill in the art to control the depth to move undesired surface features such as blemishes, thereby obtaining a desired surface finish, because chemical etching allows for control over the rate of etching by controlling the composition, delivery and parameters of etching.

Claims 49-50, 52, 56, 58-62 rejected under 35 U.S.C. 103(a) as being unpatentable over Kye et al (KR 1997-0008549) in view of Levit (US 5,348,033) and Blair (US 6,413,150 B1).

The discussion of modified Kye from above is repeated here.

As to claims 49 and 60, Kye does not disclose how the substrate is handled during the etching. It would have been obvious to one with ordinary skill in the art to place them on a common substrate to etch them in the method of Kye in order to speed up the processing so that multiple substrates can be processed together.

Blair teaches that that a useful technique is that once several chips 410 are on a common substrate 402, that they can be cut (by blade 401, Fig.4a, see also Fig.8a-8c). It would have been obvious to one with ordinary skill in the art to cut the common substrate to separate the devices

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from one another in the modified method of Kye because Blair teaches that this is a useful technique to provide the devices.

As to claims 50 and 58, Kye does not disclose the composition of the etchant. Examiner takes official notice that HF acid is a conventional etchant. It would have been obvious to one with ordinary skill in the art to use hydrofluoric acid as cited in the method of Kye because it is a conventional etchant.

As to claims 52 and 59, see the rejection of claim 25.

As to claims 56 and 62, Kye does not disclose the specific molding steps, however these are conventional in the art. It would have been obvious to one with ordinary skill in the art to mold and remove the package from the mold as cited in the method of Kye because they are conventional, useful techniques in the art.

As to claim 61, it would have been obvious to process the primary marking surface since it is useful to remove marks from any surface that they are on.

### ***Response to Amendment***

The rejection of claims 24 and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Kye et al (KR 1997-0008549) and Tsuchiko et al (JP 01-067346 A) is withdrawn since the claims have been cancelled.

The rejection of claims 51 and 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Kye et al (KR 1997-0008549), Blair (US 6,413,150 B1) and Tsuchiko et al (JP 01-067346 A) since claim 51 has been cancelled. Claim 62 is rejected over Kye in view of Levit (US 5,348,033) and Blair (US 6,413,150 B1).

The 102 rejection over Kye is withdrawn. The claims are newly rejected over various combinations that include Kye et al and newly cited Levit. Levit teaches that the new limitation in claim 22 of marking after cleaning is a conventional step. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anita K. Alanko whose telephone number is 571-272-1458. The examiner can normally be reached on Mon-Fri until 2:30 pm (Wed until 11:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nadine Norton can be reached on 571-272-1465. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Anita K. Alanko*  
Anita K Alanko  
Primary Examiner  
Art Unit 1765